

## REMARKS

By the foregoing Amendment, Claims 29-40 have been amended. Favorable reconsideration of the application is respectfully requested.

The Examiner objected to the drawings as not showing the feature “upper surface of the base member includes a detent which engages a helical surface on a lower portion of the external lower collar,” recited in Claim 33. The Examiner’s attention is directed to upper surface 72 and detent 74 of the base member 14 shown in Fig. 12, and the helix 76 of the lower lip 78 of the external lower collar 18, shown in Fig. 13, as well as Fig. 1 illustrating how the base member and external lower collar are juxtaposed. It is respectfully submitted that the feature “upper surface of the base member includes a detent which engages a helical surface on a lower portion of the external lower collar,” recited in Claim 33 is shown in the drawings, and that the objection to the drawings can therefore be withdrawn.

Claims 29-40 were rejected under 35 U.S.C. 112, second paragraph, on the grounds of indefiniteness, with regard to Claims 29 and 34 presented in the improvement or Jepson-type format. The Examiner indicated that it was unclear whether the claims were directed to the improvement, or the adjustable arc spray nozzle including the improvement. The Examiner also indicated that the preamble of the dependent claims was inconsistent with the parent claims. In order to clarify the subject matter which is claimed, the claims have amended to be directed to the “combination ... wherein the improvement comprises.” It should now be clear that the claims are directed to the

adjustable arc spray nozzle including the improvement. Claim 31 has been amended to depend from Claim 30 to provide antecedent basis for the slot recited in Claim 32, Claim 32 has been amended to recite “an amount of water,” and Claim 33 has been amended to delete the term “type,” in accordance with the Examiner’s suggestions. It is therefore believed that the Examiner’s rejection of Claims 29-40 on the grounds of indefiniteness can be withdrawn.

Claims 29-32, 34 and 35 were rejected under 35 U.S.C. 102(b) on the grounds of anticipation by Deatherage, disclosing an exhaust nozzle for use on steam engines. As is discussed in Deatherage at page 1, lines 14-21, the exhaust nozzle automatically regulates the area of the steam-escape opening according to the pressure of the steam being exhausted. As is recited in Claims 29 and 34, the claims are directed to an adjustable arc spray nozzle. There is no teaching, disclosure or suggestion in Deatherage of adjustable arc spray nozzle.

The Examiner identified the valve E and guide C of the exhaust nozzle of Deatherage as corresponding to the claimed internal helix member. Claim 29 recites “an internal helix member for controlling the arc of the spray pattern of the nozzle.” There is no teaching, disclosure or suggestion in Deatherage of an internal helix member controlling an arc of a spray pattern of a nozzle, as is claimed. The exhaust nozzle of Deatherage does not have an arc of a spray from the exhaust nozzle that can be controlled.

Claim 29 further recites “the internal helix member having means for preventing the internal helix member from rotating with respect to the top member and the base

member.” The Examiner indicated that locknut *c* and the key *g* correspond to a “means for preventing.” However, as is shown in Fig. 1 of Deatherage and explained at page 1, lines 55-78, the valve E, identified by the Examiner as corresponding to the claimed internal helix member, has an interior thread corresponding to the pitch of the thread of the guide C, which is fixedly mounted to the base member A by the locknut *c*, so that the valve E will rotate with respect to the base member as the valve E moves up and down on the guide C. Deatherage therefore does not teach, disclose or suggest an internal helix member having means for preventing the internal helix member from rotating with respect to the base member, as is claimed.

Claim 31 recites “a rotatable external lower collar for controlling the flow of the nozzle, the rotatable external lower collar being threadedly connected to a threaded outer portion of the base member.” The Examiner indicated that in Deatherage, a rotatable external lower collar would be attached to the threads *a*. However, at page 1, lines 56-63, Deatherage explains that the body A of the nozzle is provided with the interior thread *a* at its lower end by means of which the body A can be attached to an exhaust pipe. Deatherage does not teach, disclose or suggest connecting an external lower collar to a threaded outer portion of the base member, as is recited in Claim 31.

Regarding Claim 34, the Examiner indicated that Deatherage discloses an adjustable arc spray nozzle comprising an internal flow adjustment screw C having a flange *g*. As noted above, Claim 34 is directed to the combination of an adjustable arc spray nozzle with an internal flow adjustment screw. Deatherage discloses an exhaust nozzle for use on steam engines, which automatically regulates the area of the steam-

escape opening according to the pressure of the steam being exhausted, and there is no teaching, disclosure or suggestion in Deatherage of adjustable arc spray nozzle.

Claim 34 further recites “whereby rotation of the internal flow adjustment screw controls the flow of water through the discharge orifice of the nozzle proportional to the arc of the spray pattern.” The Examiner indicated that Deatherage includes an internal adjustment screw C, the guide member C, and acknowledged that the member C has the means c (the locknut), which prevents rotation of the guide member C by securing the guide member C to the base A, so that Deatherage fails to teach, disclose or suggest that the rotation of member C controls flow of water.

It is thus respectfully submitted that Claims 29-32, 34 and 35 are novel and inventive over Deatherage, and that the rejection of Claims 29-32, 34 and 35 on the grounds of anticipation by Deatherage should be withdrawn.

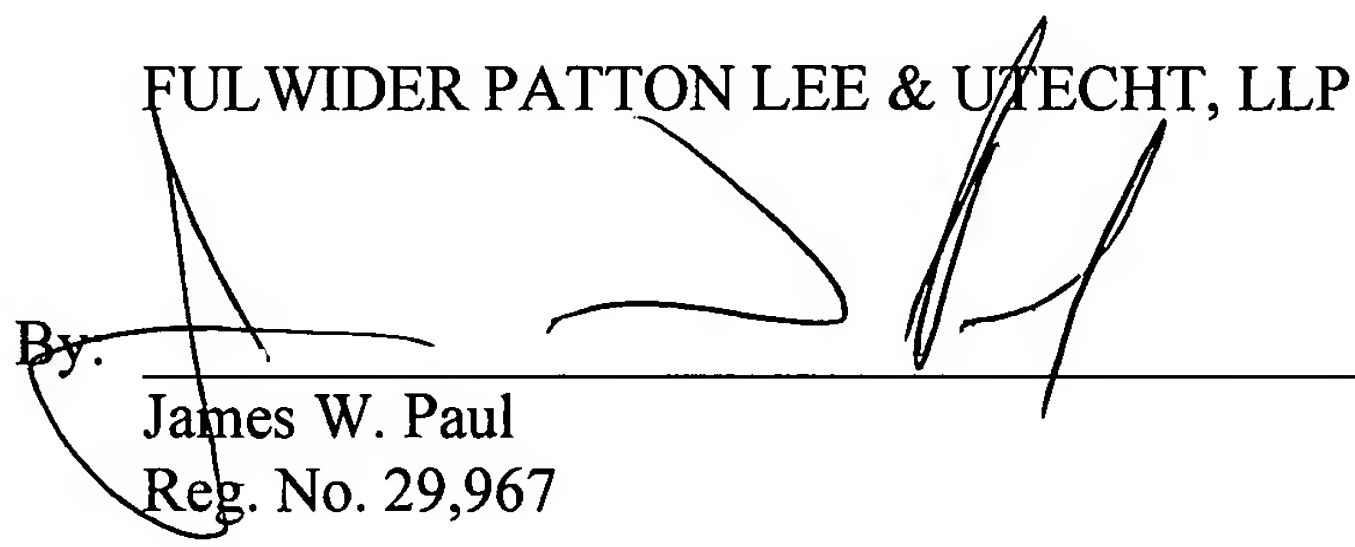
Claims 29-40 were rejected under the judicially created doctrine of obviousness-type double patenting in view of Claims 1-28 of U.S. Patent No. 6,464,151, and Claims 1-11 of U.S. Patent No. 6,637,672. It is believed that with the enclosed Terminal Disclaimer, the rejection on the grounds of obviousness-type double patenting can be withdrawn. A check covering the fee for the filing of the Terminal Disclaimer is enclosed.

Applicant has reviewed the additional prior art made of record and not relied upon, and it is believed that the additional prior art made of record and not relied upon is no more pertinent than the reference actually applied.

In light of the foregoing amendments and remarks, it is respectfully submitted that the application should now be in condition for allowance, and an early favorable action in this regard is respectfully requested.

Respectfully submitted,

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